

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-37. (canceled).

38. (previously presented): An ink jet recording apparatus comprising:
a recording head provided with a pressure generating element;
a scanning mechanism for moving the recording head in a main scanning direction;
a data developer for developing print data into multi-bit jetting data;
a drive signal generator for generating a drive signal including a plurality of drive pulses,
on every unit print cycle;
a translator for translating the multi-bit jetting data into pulse select information
associated with the respective drive pulses;
a drive pulse supplier for selectively supplying at least one of the drive pulses to the
pressure generating element in accordance with the pulse select information to drive the pressure
generating element;
a basic recording mode for recording through use of a basic unit pixel which is associated
with a unit recording area corresponding to the unit print cycle;

a high-resolution recording mode for recording through use of a fine unit pixel, a plurality of fine unit pixels being arranged within the unit recording area in the main scanning direction; and

a mode selector for selecting one of plural recording modes including the basic recording mode and the high-resolution recording mode,

wherein a number of gradation levels that can be recorded in the basic recording mode is larger than a number of gradation levels that can be recorded in the high-resolution recording mode,

wherein the same drive signal is used in each of the basic recording mode and the high resolution recording mode.

39. (canceled).

40. (canceled).

41. (canceled).

42. (previously presented): The ink jet recording apparatus as set forth in claim 38, wherein either one of the recording on the basic unit pixel and the recording on the fine unit pixel is performed by a single movement of the recording head in the main scanning direction.

43-44. (canceled).

45. (previously presented): The ink jet recording apparatus as set forth in claim 38, wherein a volume of every ink droplet ejected from the recording head is the same irrespective of the mode selected by the mode selector.

46-49. (canceled).

50. (previously presented): An ink jet recording apparatus comprising:
a recording head provided with a pressure generating element;
a scanning mechanism for moving the recording head in a main scanning direction;
a data developer for developing print data into multi-bit jetting data;
a drive signal generator for generating a drive signal including a plurality of drive pulses, on every unit print cycle;
a translator for translating the multi-bit jetting data into pulse select information associated with the respective drive pulses;
a drive pulse supplier for selectively supplying at least one of the drive pulses to the pressure generating element in accordance with the pulse select information to drive the pressure generating element;
a basic recording mode for recording a dot having a size which is selected from one of a plurality of sizes, in a basic unit pixel which is associated with a unit recording area corresponding to the unit print cycle;

a high-resolution recording mode for recording a dot in a fine unit pixel, a plurality of fine unit pixels being arranged within the unit recording area in the main scanning direction; and a mode selector for selecting one of plural recording modes including the basic recording mode and the high-resolution recording mode,

wherein the data developer develops the print data into the jetting data so as to indicate the size of the dot to be recorded in the basic unit pixel when the mode selector selects the basic recording mode; and

wherein the data developer develops the print data into the jetting data such that each bit therein indicates whether the recording is conducted or not in each associated fine unit pixel, when the mode selector selects the high-resolution recording mode,

wherein the same drive signal is used in each of the basic recording mode and the high resolution recording mode, said drive signal generator generating an identical number of drive pulses for each unit print cycle of the basic unit pixel and the fine unit pixel,

wherein the size of the dot recorded in each of the basic unit pixel and the fine unit pixel is determined by the drive pulse supplier selecting a different number of drive pulses from the drive signal having the identical number of drive pulses for each unit print cycle.

51. (canceled).